

ABSTRACT OF THE DISCLOSURE

An ability of a methanol-utilizing bacterium to produce a polysaccharide is improved or suppressed using a DNA encoding a protein selected from the group consisting of:

(A) a protein which has the amino acid sequence of SEQ ID NO: 2;

(B) a variant of a protein which has the amino acid sequence of SEQ ID NO: 2 comprising substitution, deletion, insertion or addition of one or several amino acid residues and has an activity for producing a polysaccharide;

(C) a protein which has the amino acid sequence of SEQ ID NO: 4; and

(D) a variant of a protein which has the amino acid sequence of SEQ ID NO: 4 comprising substitution, deletion, insertion or addition of one or several amino acid residues and has an activity for producing a polysaccharide.